

CLAIM:

1. A method for administering a pharmacological agent to an animal affected by a condition that is ameliorated by receiving the pharmacological agent, the method comprising:
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- applying a transmucosal drug delivery device to a mucous membrane of the animal, wherein the device comprises:
 - (i) an adhesive suitable for adhering the device to the mucous membrane; and
 - 10 (ii) the pharmacological agent.
2. The method according to claim 1 wherein the transmucosal drug delivery device comprises more than one pharmacological agent.
- 15 3. The method according to claim 1 wherein the pharmacological agent is selected from the group consisting of alpha 2 agonists, alpha 2 antagonists, analgesics, corticosteroids and sedatives.
- 20 4. The method according to claim 3 wherein the sedative is selected from the group consisting of detomidine, medetomidine, dexmedetomidine fentanyl ketamine atapamazole and pharmaceutically acceptable salts thereof.
5. The method according to claim 1 wherein the device is applied post surgically.
- 25 6. The method according to claim 1 wherein the mucous membrane is an oral mucous membrane.
7. The method according to claim 1 wherein the condition ameliorated is an ophthalmic condition and the mucous membrane is a conjunctival membrane.
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8. A method for modifying a physiological system of an animal, the method comprising:

- applying a transmucosal drug delivery device to a mucous membrane of the animal, wherein the device comprises:
 - (i) an adhesive suitable for adhering the device to the mucous membrane; and
 - (ii) a pharmacological agent effective for modifying the physiological system of the animal.

9. The method according to claim 8 wherein the physiological system modified is the reproductive system.

10. The method according to claim 8 wherein the physiological system modified is the immune system.

11. A transmucosal drug delivery device having a composition comprising:

- a polymeric resin;
- a linear elastomeric polymer;
- a cross-linked elastomeric polymer being 30-80% cross-linked; and
- a pharmacological agent.

12. The transmucosal drug delivery device according to claim 11 wherein the ratio of linear elastomeric polymer to cross-linked elastomeric polymer is about 1:2 to 5:1.

13. A transmucosal drug delivery device according to claim 11 wherein:

- (i) the polymeric resin is a particulate polymeric resin present in an amount of from about 40 to about 65 percent by weight based on the total weight of the composition;
- (ii) the linear elastomeric polymer is present in an amount of from about 15

to about 50 percent by weight based on the total weight of the composition;
and

- (iii) the cross-linked elastomeric polymer is present in an amount of from
about 5 to about 30 percent by weight based on the total weight of the
composition.

14. The transmucosal drug delivery device according to claim 13 wherein the
particulate polymeric resin is a linear polyacrylic acid resin.

15. The transmucosal drug delivery device according to claim 13 wherein the linear
elastomeric polymer is selected from the group consisting of polyisobutylene,
polyisoprene and mixtures thereof.

16. The transmucosal drug delivery device according to claim 13 wherein the cross-
linked elastomeric polymer is a cross-linked butyl terpolymer rubber.

17. The transmucosal drug delivery device according to claim 13 further comprising a
penetration enhancer.

18. The transmucosal drug delivery device according to claim 11 wherein the
pharmacological agent is selected from the group consisting of detomidine,
medetomidine, dexmedetomidine atapamazole, fentanyl, ketamine and
pharmaceutically acceptably salts thereof.

19. The transmucosal drug delivery device according to claim 17 wherein the
pharmacological agent is present in an amount of from about 2 to about 5 percent
by weight based on the total weight of the composition and the pharmacological
agent is selected from the group consisting of medetomidine, dexmedetomidine
and pharmaceutically acceptable salts thereof; and glycerol monolaurate is present
in an amount of from about 0.5 to 5 percent by weight based on the total weight of

the composition.

20. The transmucosal drug delivery device according to claim 11 wherein the pharmacological agent is present in an amount from about 0.5 to about 10 percent based on the total weight of the composition.

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